



# NOAA In Your Territory U.S. Virgin Islands

"NOAA's science based work touches 300 million Americans daily, protecting lives and livelihoods. NOAA's products and services are the result of the hard work of our dedicated staff and partner organizations located in program and research offices throughout the globe. The following is a summary of NOAA programs based in, and focused on, your state or territory. The entries are listed by statewide, region, and then by congressional districts and cities or towns."

Dr. Kathryn Sullivan

Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator

#### USVI

#### **Entire Territory**

#### **NOAA - Coral Reef Conservation Program**

NOAA's Coral Reef Conservation Program brings together multidisciplinary expertise from over 30 NOAA offices and partners with state and federal agencies, academia, non-governmental organizations and community coastal resource managers to protect, conserve and restore coral reef resources that sustain livelihoods and economic development. In response to identified threats and management priorities developed by coral reef managers in the USVI, NOAA invests in initiatives to identify priority watersheds and develop management plans to reduce pollutant inputs to reef resources, build stewardship capacity for conservation programs, reduce fishing impacts on stocks that affect reef resiliency and health, and promote reef recovery from coral bleaching, ship groundings and other events.

Examples of projects include characterizing the East End Marine Park species, habitats and sources of land-based pollution to evaluate zones and support watershed management plan development and reviews, enhancing enforcement of marine protection regulations and operating Acropora nurseries to continue production and outplanting of corals to support the Acropora recovery plan. By training enforcement officers in the identification of fishery species, the DPNR Division of Environmental Enforcement will be able to effectively investigate, document, and prosecute fishery and other violations in the USVI. The training, funded by NOAA Coral Reef Conservation Program, focuses on the importance of effective marine enforcement to protect coral reef ecosystem resources. Scuba, field and classroom training are part of the training plan.

#### National Marine Fisheries Services (NMFS) - Restoration Center

The Restoration Center works with private and public partners in the USVI and nationwide to restore coastal habitat. We provide technical and financial assistance to help recover threatened and endangered species, support sustainably managed species, and reverse the damage done by oil spills and toxic releases. In USVI, we focus on restoring habitats, implementing projects that reduce threats to coral habitats including reducing land-based sources of pollution, emergency response to vessel groundings, and placement of navigational aids to reduce the occurrence of future groundings. Currently, for example, we are partnering with local, state, and federal agencies to implement sediment and erosion control practices to reduce sediment loadings to coral habitats. By reducing localized threats to coral reef habitats we make the species more resilient to global threats, such as ocean acidification and increased sea surface temperatures. We also partner with local organizations through the operation of 5 coral nurseries in USVI to actively restore coral habitats and enhance threatened coral populations. Through the Damage Assessment Remediation and Restoration Program, the Restoration Center also collaborates with other agencies, industry, and citizens to protect and restore coastal and marine resources in USVI threatened or injured by vessel groundings.

National Marine Fisheries Service (NMFS) - Southeast Regional Office and Southeast Fisheries Science Center NMFS studies, protects and conserves living marine resources to promote healthy, functioning marine ecosystems, afford economic opportunities and enhance the quality of life for the American public. NMFS' Southeast Regional Office (headquartered in Saint Petersburg, FL) and Southeast Fisheries Science Center (headquartered in Miami, FL) are responsible for living marine resources in federal waters of the Gulf of Mexico, South Atlantic, and U.S. Caribbean. Using the authorities provided by the Magnuson-Stevens Fishery Conservation and Management Act, Endangered Species Act, Marine Mammal Protection Act and other federal statutes, the Southeast Regional Office and Southeast Fisheries Science Center partner to assess and predict the status of fish stocks, marine mammals and other protected resources, develop and ensure compliance with fishery regulations, restore and protect habitat, and recover threatened and endangered species in waters off the U.S. Virgin Islands and throughout the Southeast Region.

The Southeast Regional Office conducts mandated essential fish habitat consultations associated with extensive energy and coastal development activities, participates in state and regional habitat planning and restoration efforts, provides assistance during hazardous material incidents and hurricane events, and participates in the planning processes for major federal water development projects.

The Southeast Fisheries Science Center implements a multi-disciplinary science and research program in support of living marine resource management. The Science Center develops the scientific information required for fishery resource conservation; fishery development and utilization; habitat conservation; the protection of marine mammals, sea turtles and other protected species; impact analyses and environmental assessments for management plans and/or international negotiations; and pursues research to answer specific needs in areas of population dynamics, fishery economics, fishery engineering, food science, and fishery biology.

#### National Weather Service (NWS) - Automated Surface Observing Systems Stations

The Automated Surface Observing Systems (ASOS) program is a joint effort of the National Weather Service (NWS), the Federal Aviation Administration (FAA), and the Department of Defense (DOD). ASOS serves as the Nation's primary surface weather observing network. ASOS is designed to support weather forecast activities and aviation operations and, at the same time, support the needs of the meteorological, hydrological, and climatological research communities. ASOS works non-stop, updating observations every minute, 24 hours a day, every day of the year observing basic weather elements, such as cloud cover, precipitation, wind, sea level pressure, and conditions, such as rain, snow, freezing rain, thunderstorms, and fog. There are two ASOS stations in the territory.

#### National Weather Service (NWS) - Cooperative Observer Program Sites

The National Weather Service (NWS) Cooperative Observer Program (COOP) is comprised of more than 10,000 volunteers who take observations on farms, in urban and suburban areas, National Parks, seashores, and mountaintops. The data are representative of where people live, work and play. The COOP provides observational meteorological data, usually consisting of daily maximum and minimum temperatures, snowfall, and 24-hour precipitation totals, required to define the climate of the United States and to help measure long-term climate changes, and to provide observational meteorological data in near real-time to support forecast, warning and other public service programs of the NWS. The data are also used by other federal (including the Department of Homeland Security), state and local entities, as well as private companies (such as the energy and insurance industries). In some cases, the data are used to make billions of dollars' worth of decisions. For example, the energy sector uses COOP data to calculate the Heating and Cooling Degree Days which are used to determine individuals' energy bills monthly. There are nine COOP sites in the territory.

#### National Weather Service (NWS) - NOAA Weather Radio All Hazards Transmitter

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service (NWS) forecast office. NWR broadcasts official NWS warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week. Working with the Federal Communication Commission's (FCC) Emergency Alert System, NWR is an "All Hazards" radio network, making it the single source for comprehensive weather and emergency information. In conjunction with federal, state, and local emergency managers and other public officials, NWR also broadcasts warning and post-event information for all types of hazards – including natural (such as earthquakes), environmental (such as oil spills), and public safety. NWR is provided as a public service by the NWS. NWR includes 1,100 transmitters covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. There is one NWR transmitters in the territory.

#### National Weather Service (NWS) - Weather Forecast Office

Located in Puerto Rico (San Juan at Carolina), this NWS Weather Forecast Office (WFO) provides weather and flood warnings, daily forecasts and meteorologic and hydrologic data for Puerto Rico and the U.S. Virgin Islands. This office also provides marine warnings and forecasts for the waters surrounding Puerto Rico and the U.S. Virgin Islands. Highly trained forecasters issue warnings and forecasts for events, including severe thunderstorms, tornadoes, winter storms, floods, and heat waves. This essential information is provided to the general public, media, emergency management and law enforcement officials, the aviation and marine communities, agricultural interests, businesses, and others. Information is disseminated in many ways, including through dedicated government channels, satellite, the Internet, and NOAA Weather Radio All Hazards.

Forecasters also provide Impact-based Decision-Support Services (IDSS), both remotely and on-site, during critical emergencies, such as wildfires, floods, chemical spills, and for major recovery efforts such as those following the Joplin and Moore tornadoes, Hurricanes Katrina and Sandy, and the Sept. 11, 2001, terrorist attacks in New York City and Washington D.C. The WFO collects and disseminates precipitation, river, and rainfall data, and prepares local climatological data. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs, which helps build strong working relationships with local partners in emergency management, government, the media and academic communities. The WFO operates Automated Surface Observing Stations (ASOS), as well as the local Doppler Weather Radar, which provides critical information about current weather conditions. The radar data enables forecasters to issue warnings for tornadoes, severe thunderstorms, and flash floods.

#### Coastal

#### National Marine Fisheries Service (NMFS) - Species Recovery Program

Under the authority of section 6 of the Endangered Species Act, the Cooperation with States Program brings states, NMFS, and other partners together to recover threatened and endangered species. Competitive grants are awarded to states through the Species Recovery Grant Program to support management, monitoring, research and outreach efforts for species that spend all or a portion of their life cycle in state waters. The funded work is designed to prevent extinctions or reverse the decline of species, and restore ecosystems and their related socioeconomic benefits. Twenty-five coastal states and U.S. territories, including the U.S. Virgin Islands, currently participate in this program.

### National Marine Fisheries Service (NMFS) - <u>National Marine Mammal Stranding Network</u> and <u>John H. Prescott</u> <u>Marine Mammal Rescue Assistance Grant Program</u>

The National Marine Mammal Stranding Network and its trained professionals respond to dead or live marine mammals in distress that are stranded, entangled, out of habitat or otherwise in peril. Our long-standing partnership with the Network provides valuable environmental intelligence, helping NOAA establish links among the health of marine mammals, coastal ecosystems, and coastal communities as well as develop effective conservation programs for marine mammal populations in the wild. There is one stranding network member in the territory. NOAA Fisheries funds eligible members of the Stranding Network through the competitive John H. Prescott Marine Mammal Rescue Assistance Grant Program. Since 2001, \$48.2 million has been awarded to 552 grantees who raised over \$15.9 million in matching funds. In FY15, 34 grantees received \$2.7million.

#### National Marine Fisheries Service (NMFS) - Sea Turtle Salvage and Stranding Network

The Sea Turtle Stranding and Salvage Network (STSSN) was formally established in 1980 to collect information on and document strandings of marine turtles along the U.S. Gulf of Mexico and Atlantic coasts. The network, which includes federal, state and private partners, encompasses the coastal areas of the eighteen-state region from Maine to Texas, and includes portions of the U.S. Caribbean. Data gathered by the Network helps inform bycatch reduction efforts, track factors affecting turtle health, and provide other information needed for sea turtle management and population recovery.

#### National Ocean Service (NOS) - Coastal Management Program

Through a unique Federal-state partnership, NOAA's Office for Coastal Management (OCM) works with the U.S. Virgin Islands Department of Planning and Natural Resources to implement the National Coastal Zone Management Program in the USVI. OCM provides the coastal management program with financial and technical assistance to further the goals of the Coastal Zone Management Act and ensure our coastal waters and lands are used in a balanced way to support jobs, reduce use conflicts, and sustain natural resources.

#### National Ocean Service (NOS) - Coral Reef Conservation Program

NOAA's Coral Reef Conservation Program brings together multidisciplinary expertise from over 30 NOAA offices and partners. The goal is to protect, conserve and restore coral reef resources. In response to identified threats and management priorities developed by coral reef managers in U.S. Virgin Islands, NOAA invests in initiatives to identify priority watersheds and develop management plans to reduce pollutant inputs to reef resources, build stewardship capacity for conservation programs, reduce fishing impacts on stocks that affect reef resiliency and health, and promote reef recovery from coral bleaching, ship groundings, and other events. Examples of projects include: characterizing the East End Marine Park species, support watershed management plan development and reviews, enhance enforcement of marine protection regulations, and operating nurseries to continue coral production and planting to support the Acropora recovery plan.

#### National Ocean Service (NOS) - Navigation Manager

NOAA's navigation managers work directly with pilots, port authorities, and recreational boating organizations in the U.S. Virgin Islands. They help identify the navigational challenges facing marine transportation in the U.S. Virgin Islands and provide NOAA's resources and services that promote safe and efficient navigation. Navigation managers are on call to provide expertise and NOAA navigation response coordination in case of severe coastal weather events or other marine emergencies. The Office of Coast Survey has a navigation manager in St. Petersburg, Florida to support mariners and stakeholders in South Florida, Puerto Rico, and the U.S. Virgin Islands.

#### National Ocean Service (NOS) - Caribbean Environmental Response Management Application

Assessing important spatial information and designing successful restoration projects rely upon interpreting and mapping geographic information, including the location, duration, and impacts from oil spills, other hazardous materials, or debris released into the environment. Caribbean ERMA® is an online mapping tool that integrates both static and real-time data, such as Environmental Sensitivity Index (ESI) maps, ship locations, weather, and ocean currents, in a centralized, easy-to-use format for environmental responders and decision makers. Caribbean ERMA has been used to visualize environmental response data during a regional oil spill drill, to map small vessel groundings near coral reefs, and to assist in identifying resources affected by the 2009 fire at an oil storage facility in Puerto Rico.

#### National Ocean Service (NOS) - Caribbean Coastal Ocean Observing System

U.S. IOOS® is an operational system and a network of regional partners responsible for regional observations, data management, modeling and analysis, education and outreach, and research and development. The overarching purpose of U.S. IOOS is to address regional and national needs for ocean data and information. The Caribbean Regional Association (CaRA) is one of 11 Integrated Ocean Observing System (IOOS) Program Regional Associations being established through IOOS. CaRA is driving the implementation of the Caribbean Coastal Ocean Observing System (CariCOOS) for Puerto Rico and the U.S. Virgin Islands. CariCOOS is focused on meeting identified stakeholder needs for improved real time data products and forecasts of coastal weather (winds, waves and currents), water quality and hurricane-driven inundation for the U.S. Caribbean Exclusive Economic Zone (EEZ).

#### Charlotte Amalie and Limetree Bay

#### National Ocean Service (NOS) - National Water Level Observation Network

The National Ocean Service (NOS) operates four long-term continuously operating tide stations in the U.S. Virgin Islands, which provide data and information on tidal data and relative mean sea level trends, and are capable of producing real-time data for storm surge warning. These stations are located at Lime Tree Bay, Christiansted, Lameshur Bay, and Charlotte, VI. Each station is associated with a set of tidal benchmarks installed in the ground that is used to reference the height of the water levels and helps connect the water level to land.

#### St. Croix

#### National Marine Fisheries Service (NMFS) - Habitat Conservation Division

The St. Croix Field Office is located within the Federal Building on St. Croix. This Office is responsible for implementing NOAA's Coral Reef Conservation Program in the U.S. Virgin Islands. The Office works with the U.S. Virgin Islands government and stakeholders to reduce the impacts of fishing on coral reef habitat

NOAA In Your State is managed by NOAA's Office of Legislative and Intergovernmental Affairs and maintained with information provided by NOAA's Line and Staff Offices. Questions about specific programs or offices should be directed to the NOAA Line or Staff Office listed.

More information for those offices may be found at NOAA.gov.

## NOAA In Your Territory Puerto Rico



